

A New Tropical American Species of the Genus *Lycopodium*

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During studies of the Lycopodiaceae for the "Ferns and Fern Allies of Guatemala" by Robert G. Stolze, a total of 24 species was found to be represented in this country. One of these is an undescribed species which occurs also in northern Andean South America.

***Lycopodium amentaceum* B. Øllgaard, sp. nov.**

Fig. 1-4.

Species *Lycopodium callitrichifolium* Mett. et *L. cuneifolium* Hieron. proxime affinis, caulibus tenuibus pendentibus usque ad 60 cm longis, dichotomis, ca. 0.6-1.3 mm crassis in sicco foliis exclusis, apicem versus gradatim usque ad 0.5 mm decrescentibus, teretibus vel striato-sulcatis, praesertim parte inferiore saepe rubris; rami foliis dimorphis; rami basales foliis expansis usque ad 50 cm longi, (10)12-20 mm crassi foliis inclusis, usque ad quinquies bifurcati; rami apicales foliis valde reductis imbricatis, zonatim vel continuiter sporangiferis, usque ad 30 cm longi, usque ad decies bifurcati; folia ramorum basalia decussata vel subdecussata, internodiis 2.5-4 mm longis, patentia vel perpendicularia, oblonge lanceolata vel lanceolata, apicibus obtusis vel breviter mucronulatis, basibus et apicibus saepe fere symmetricis, recta vel recurvata, (4)6-10 mm longa, 2-3(3.5) mm in medio lata, laminae plerumque torsione basali verticalibus, plana vel venas secus deorsum parum plicata; folia ramorum apicalia decussata vel subdecussata, internodiis 1-3 mm longis, laxe vel arcte imbricata, fere uniformia, late ovata, apice rotundata, acuta vel mucronata, intro subfalcata, basibus amplexantibus, abaxialiter rotundata usque ad carinata, 1.2-1.7 mm longa, 1.2-1.5 mm lata; sporangia reniformia, ca. 1 mm lata.

TYPE: Camino al Páramo de Los Monsalves, Edo. Mérida, Venezuela, epifito péndulo, sobre tronco, en la faja superior de la selva montanera, 3000 m alt., 10 June 1952, *Vareschi & Pannier 1817* (VEN; isotype M).

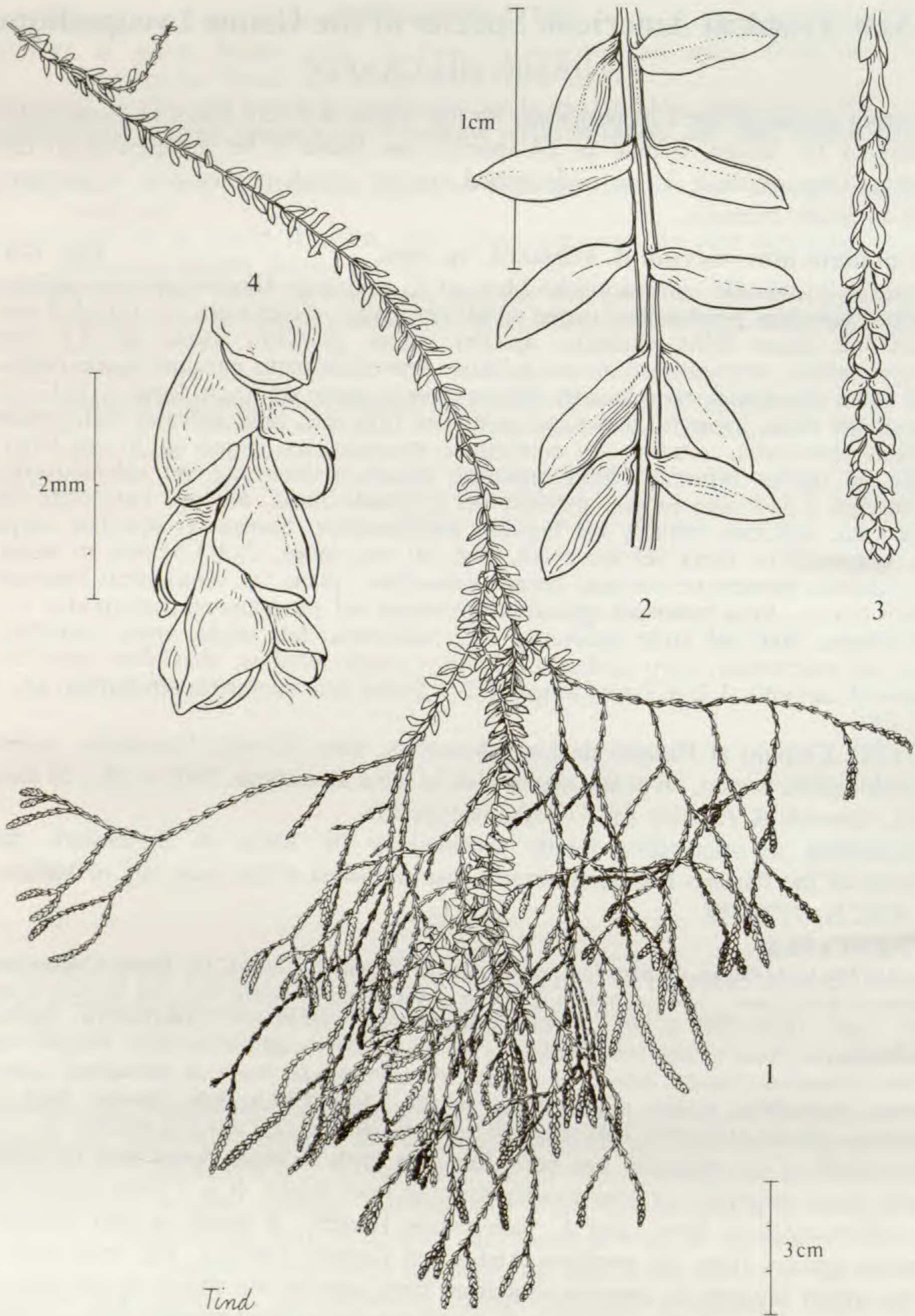
According to information kindly provided by Dr. Julian A. Steyermark, the location of the Páramo Los Monsalves is just northwest of the main city of Mérida, ca. 8°42'N, 71°08'W.

PARATYPES:

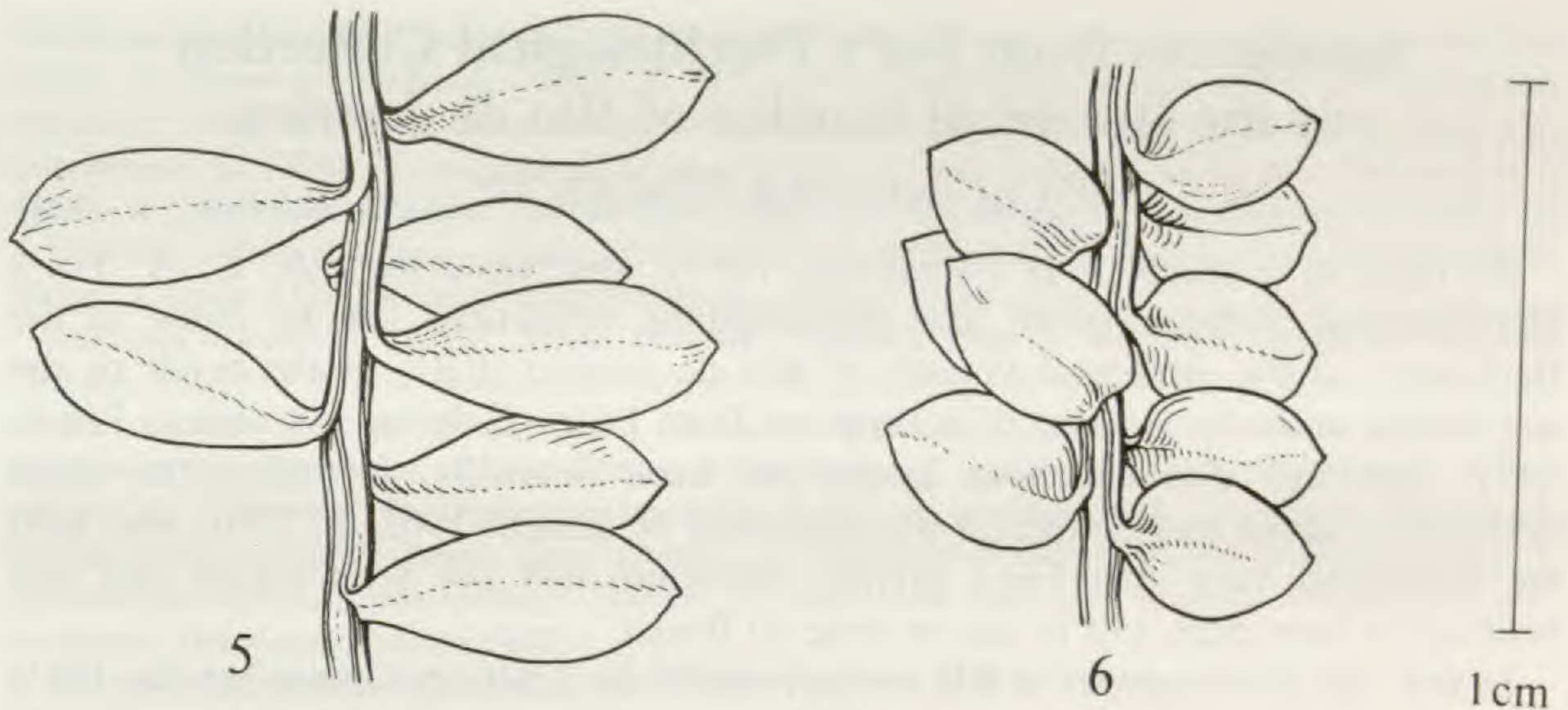
GUATEMALA: Depto. Quiché: *José Ignacio Aguilar 828* and *1019* in 1942 (F). **Depto. Guatemala:** On tree in dense forest, slopes of Volcán de Pacaya, between San Francisco Sales and the base of the active cone, 1800-2300 m alt., 20 Dec 1940, *Standley 80538* (F). **COLOMBIA: Depto. Cundinamarca:** Road to east from Guasca, on wet bank, 3200 m alt., 6 Jun 1947, *Haught 5826* (COL). Monserrate, Bogotá, 2900 m alt., *Lindig 1504* (P). **Depto. Norte de Santander:** Ocaña, páramos, 8000-10000 ft alt., *Schlim 468 p. p.* (P). **VENEZUELA: Edo. Mérida:** Selva de Podocarpus, Páramo Monsalves, 3190 m alt., 10 Nov 1952, *Vareschi 2232* and *2272* (VEN).

Lycopodium amentaceum has been found in high montane forest and in cloud forest, as an epiphyte, or occasionally hanging from banks. It is a close relative of *L. callitrichifolium* Mett. and *L. cuneifolium* Hieron., a group of very delicate pendent species from the northern Andes and Central America. The main differences which separate *L. amentaceum* from these species are shown by the typical outline of the expanded leaves (Figs. 5-6). In the size of the expanded leaves it also resembles *L. phyllicifolium* Desv. ex Poir., but its leaves are broader and more obtuse, both at the base and apex.

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FIGS. 1-4. Isotype of *Lycopodium amentaceum*, Vareschi & Pannier 1817 (M). FIG. 1. Habit. FIG. 2. Portion of basal division with expanded leaves. FIGS. 3 and 4. Portions of apical sporangiate divisions.



FIGS. 5-6. Portions of basal divisions with expanded leaves. FIG. 5. *L. cuneifolium* Hieron., Schlim 881 (P). FIG. 6. *L. callitrichifolium* Mett., Holm-Nielsen et al. 3988 (AAU).

The plants treated and illustrated as *L. callitrichifolium* by Vareschi in Lasser (Flora de Venezuela 1(1):41, t. 2A. 1969) belong to *L. amentaceum*, and include the type of the latter. The Guatemalan specimens had been identified as *L. skutchii* Maxon, a name which I regard as a synonym of *L. myrsinites* Lam. From the latter species it can be distinguished by its red stems, smaller sporophylls (more than 2 mm long in *L. myrsinites*), almost uniform leaves (highly variable and often recurrent to expanded in shape in *L. myrsinites*), and obtuse leaves (acute in *L. myrsinites*).